

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 10/750,090

Filing Date: December 31, 2003

Title: BEHAVIORAL MODEL BASED MULTI-THREADED ARCHITECTURE

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Dkt: P18029**REMARKS**

Applicant respectfully requests reconsideration of this application in view of the following remarks and the above amendments. This response is believed to fully address all issues raised in the Office Action mailed September 15, 2008. Furthermore, no new matter is believed to have been introduced hereby.

Claims 1-34 remain pending as amended above.

35 USC § 101 Rejection of the Claims

Claims 13-17 were rejected under 35 USC § 101 as the claimed invention was indicated to be directed to non-statutory subject matter. It is believed that the above-detailed amendment to claim 13 fully addresses this rejection.

35 USC § 112 Rejection of the Claims

Claims 1-34 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In response, it is respectfully submitted that the above-detailed amendments clarify the terms first state and second state and therefore full address these outstanding rejections. As an example, the Examiner is kindly invited to review the discussion of the ACK-SUPP field with reference to Fig. 2 and paragraphs [0028], [0030], [0034], and [0067] et seq. regarding the application of the claimed variable in various embodiments.

35 USC §§ 102 and 103 Rejection of the Claims

Claims 1-2, 4-5, 7-8, 10-20, 23-29, 32-34 were rejected under 35 USC § 102(e) as being anticipated by Kumar et al. (U.S. Publication No. 20030167268; "Kumar" hereinafter).

Claims 3, 6, 9, 21-22, 30-31 were rejected under 35 USC § 103(a) as being unpatentable over Kumar.

Each of these rejections is respectfully traversed since the cited art, alone or in combination, fails to teach or suggest the claimed combination of features such as set forth in any of the pending claims.

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Initially, it is noted that Kumar fails to teach anything about a “semaphore.” In fact, Kumar appears to discuss a conventional lock mechanism (or at best a “passive” locking mechanism) such as discussed in the background section of the present application.

More particularly, Without limiting the scope of embodiments of the invention, only in an effort to impart precision to the claims (e.g., by more particularly pointing out embodiments of the invention, rather than to avoid prior art), and merely to expedite the prosecution of the present application, Applicant has amended independent claim 1 to in part recite that the claimed semaphore is to cause change in a state of the thread via a thread scheduler.

It is respectfully submitted that Kumar clearly fails to teach a thread scheduler or a semaphore such as claimed. In fact, Kumar’s lock mechanism is incapable of allowing a semaphore (or a locked resource) to cause change in a state of a thread (e.g., inactive or active, in response to a respective unresolved/resolved dependency, for example such as discussed in the abstract of the present application). Accordingly, claim 1 is believed to be in condition for allowance.

The remaining independent claims recite similar (though not identical) language and have been rejected for similar reasons as claim 1. Hence, these remaining independent claims should be allowable for at least similar reasons as claim 1, as well as additional or alternative elements that are recited therein but not shown in the cited prior art.

Also, all pending dependent claims should be allowable for at least similar reasons as their respective independent claims, as well as additional or alternative elements that are recited therein but not shown in the cited prior art.

For example, with respect to claims 3, 22, and 31, Kumar fails to teach a semaphore that automatically transmits a message indicating control of the semaphore to execution circuitry. This distinction is further evident in light of the above amendments to the independent claims.

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Dkt: P18029**Conclusion**

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (303.800.6678) to facilitate prosecution of this application.

Applicant hereby petitions, as well as includes the appropriate fee herewith, to obtain a one-month extension of the period for responding to the Office action, thereby moving the deadline for response from December 15, 2008, to January 15, 2009.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-4238.

Respectfully submitted,

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Date January 15, 2009By /Ramin Aghevli/
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